CLAIM AMENDMENTS

1. (CURRENTLY AMENDED) Apparatus for ~~linearly~~ oscillating ~~slewing~~ a device fixed to a two degree of freedom gyroscope having a spinning rotor, said device being associated with a two-axis system said apparatus comprising, in combination:

a) said gyroscope including a first forcer for applying a first torque with respect to a first rotor axis in response to a first alternating signal and a second forcer for applying a second torque to said rotor with respect to a second, orthogonal rotor axis in response to a second signal;

b) a first pickoff for detecting deflection of said rotor about said first rotor axis and generating a first pickoff signal in response and a second pickoff for detecting deflection of said rotor about said second rotor axis and generating a second pickoff signal in response;

c) a first motor for driving said device about a first device axis in response to said first pickoff signal and a second motor for driving said device about a second device axis in response to said second pickoff signal; and

d) ~~at least one~~ a cross-axis circuit for receiving ~~one of~~ said first signal ~~and second signals~~ and deriving the ~~other of said first and~~ second signal ~~signals~~ as the derivative thereof.

2. (CANCELED)

3. (PREVIOUSLY PRESENTED) Apparatus as defined in Claim 1 wherein a gain of said at least one cross-axis circuit is inversely proportional to a nutation frequency of said rotor.

4. (PREVIOUSLY PRESENTED) Apparatus as defined in Claim 1 wherein a transfer function T(s) of said at least one cross-axis circuit is

$$T(s) = Ks/(s + 2\pi k f_{nut})$$

where k is an integer and f_{nut} is a nutation frequency of said rotor.

5. (ORIGINAL) Apparatus as defined in Claim 1 wherein said at least one cross-axis circuit comprises an operational amplifier.

6. (CURRENTLY AMENDED) Apparatus as defined in Claim 5 wherein said at least one cross-axis circuit comprises <u>said</u> ~~an~~ operational amplifier including a feedback resistor in parallel with a feedback capacitor.

7. (ORIGINAL) Apparatus as defined in Claim 1 further comprising a second cross-axis circuit arranged to receive said second signal and to generate said first signal in response thereto.

8. (PREVIOUSLY PRESENTED) Apparatus as defined in Claim 7 wherein each cross-axis circuit generates an output signal comprising a derivative of an input signal.

9. (PREVIOUSLY PRESENTED) Apparatus as defined in Claim 8 wherein a gain of each cross-axis circuit is inversely proportional to a nutation frequency of said rotor.

10. (PREVIOUSLY PRESENTED) Apparatus as defined in Claim 7 wherein a transfer function T(s) of each of said cross-axis circuits is

$$T(s) = Ks/(s + 2\pi k f_{nut})$$

where k is an integer and f_{nut} is a nutation frequency of said rotor.

11. (ORIGINAL) Apparatus as defined in Claim 7 wherein each of said cross-axis circuits comprises an operational amplifier.

12. (CURRENTLY AMENDED) Apparatus as defined in Claim 11 wherein each of said cross-axis circuits comprises <u>said</u> ~~an~~ operational amplifier including a feedback resistor in parallel with a feedback capacitor.

13. (CANCELED)

14. (CANCELED)

15. (CANCELED)

16. (CANCELED)

17. (CANCELED)

18. (CANCELED)

19. (CANCELED)

20. (CANCELED)

21. (PREVIOUSLY PRESENTED) Apparatus as defined in Claim 1 wherein said device is a camera.